



**NOAA Teacher at Sea  
Philip J. Hertzog  
Onboard NOAA Ship RAINIER  
July 24 - August 13, 2005**

**Log 2**

Day 2: July 26, 2005

Time: 1800 hours

Latitude: 55° 44.95' N

Longitude: 158° 47.42' W

Visibility: 10 nm

Wind Direction: 065°

Wind Speed: 7 kts

Sea Wave Height: 2 feet

Sea Water Temperature: 13.3° C

Sea Level Pressure: 1011 mb

Cloud Cover: 8, stratus, cirrocumulus

**Science and Technology Log**

Today the RAINIER continues its journey from Kodiak Island to Mitrofanina Island where our mapping work will start. I awoke and found the ship off the coast of Kodiak Island in the Shelikof Strait that separates Kodiak Island with the southwestern Alaskan peninsula. A straight is a long stretch of water where the wind can travel great distances without being blocked and build up large waves.

The waves in the Strait are between 1 and 2 feet high, but it is enough to rock the ship back and forth. I have to be careful not to spill any food or drinks in the cafeteria and it takes a while to get use to the rocking back and forth.

Though we are traveling today, our ship's crew is already working and mapping the bottom of the Shelikof Strait. I attended a meeting lead by Lt. Ben Evans and listened to him explain our plan for the next several days. Today we are using the ship's sonar to map the main portion of the Shelikof Strait and to look for anything that could harm ship traffic. The sonar sends beams of energy in the form of sound waves to the bottom which then bounce back to the ship. By measuring how long it takes for the sound to return to the ship, a computer can determine how deep the channel is.

Behind the bridge is the plot room where the mapping action takes place. The plot room has a big table in the middle to lay out charts and several computer stations line the walls around the table. Each computer station has two monitors hooked together so the hydrographer (a person who maps the ocean bottom) can put up sonar images and compare it to maps and other information. Today we had one of the computer stations working to show the data being collected for the Shelikof Strait. The bottom is around

400 meters deep and relatively flat. The computer monitor shows us a colorful image of the bottom depths as we move along the straight.



In the late afternoon, we enter into a large bay and circle around to the back side of Mitrofanina Island. Suddenly, I see four sprays of water in the air, one right after another, about half a mile from the ship. As we move farther into the bay, we see more sprays and soon see curved, dark backs surface and then glide along the surface in an arch before disappearing below the surface. As we move closer we can make out a tiny fin on these large

creatures toward the rear of their backs and realize these are fin whales.

Fin whales are one of the largest whales found in the world and can reach 24 meters in size. All around us we see spray being blown out by the fin whales as they surface and mill about with each other. One whale surfaces right in front of the RAINIER and the Captain had to back off on the engine to avoid a collision. The whale moved to the side of our ship as we slowed down and I could see it staying in the same place for 3-5 seconds looking up at us before moving away below the surface.

After our greeting by the fin whales, the Captain anchored the RAINIER in a quiet bay off Mitrofanina and the crew prepared for a busy day of mapping tomorrow.

### **Personal Log**

Though I find I am excited to be on the RAINIER, I found myself dizzy with a little bit of motion sickness from the rocking of the ship in Shelikof Strait. Taking the advice from books and several of the crew members, I kept myself from becoming sicker by getting fresh air on the deck and looking at the horizon. I also drank plenty of fluids and ate all of my meals. After a couple of hours and a nap, I felt much better.

The high point of the day came when we entered Mitrofanina Bay and saw the fin whales. We also saw salmon jumping throughout the bay and several of the crewmembers fished off the back of the RAINIER after they had finished their duties for the day.



**Question of the Day**

What do fin whales eat and where do they spend the winter?